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## **Brief Reports**

With this issue of the *Journal*, we initiate a section for Brief Reports. This section is intended to contain useful new information in brief form, rather than comments on articles published in the *Journal* or on editorial policies, which we view as subjects for our Letters to the Editor section.

In submitting a manuscript for possible publication as a Brief Report, please limit it to four double-spaced typewritten pages, excluding references. While an abstract is to be omitted, the Report itself should conclude with a concise summary of the information presented.

The Journal is not hereby committed to publish all of the Brief Reports which may be submitted. As with all other contributions, the decision as to acceptability will rest with the Editors.

## TELEPHONE HOUSEHOLD SCREENING AND INTERVIEWING

BERNARD L. HARLOW¹ AND PATRICIA HARTGE²

Selection of random population samples by telephone and telephone interviewing of study subjects have become useful tools in epidemiologic research. When stratified or matched sampling designs are combined with subsequent telephone interviewing, we have found the overall response rates to be in the range of 75 to 85 per cent. We recently obtained a higher overall response rate (91 per cent) by sampling and immediately interviewing eligible respondents over the telephone. Our findings may be of interest to other investigators using telephone sampling and interviewing.

As part of a case-control study in the Washington, DC area, we conducted telephone interviews with an age-stratified sample of women (two strata: 30-49 years and 50-69 years). The Waksberg (1) random digit dialing procedure was used to identify residential telephone numbers. Of the 590 residential telephone numbers called, 575 (97 per cent) yielded

the information on ages of household members needed to draw the stratified sample (we refer to this as the screening response rate). Ninety-four per cent of the 175 women selected at that time were immediately interviewed (we refer to this as the interview response rate). The estimated overall response rate (97 per cent × 94 per cent = 91 per cent) is higher than often can be achieved when the population is sampled and sent a letter between telephone screening and interviewing. We have considered possible explanations for this high response rate, which may be of interest to other epidemiologists who use the telephone for sampling and interviewing.

Before the study we conducted a test on 50 households. At half of the households we asked for the full names and ages of all women in the households and for an address to which to mail a letter explaining the study. After the telephone call we sent a letter to all household members selected into the sample, and seven days later all eligible women were called to arrange a telephone interview. In the other 25 households, full names and addresses were

Westat, Inc., Rockville, MD 20850.

<sup>&</sup>lt;sup>2</sup> Environmental Epidemiology Branch, National Cancer Institute, Bethesda, MD 20205.

not asked and the sample selection was done by the interviewer during the telephone call. All eligible women were immediately asked for an interview or, if they were not home, called later. The screening response rate was 16 percentage points lower in the households where full names and addresses were asked, but among the identified eligible women the interview response rates were nearly identical.

Since asking for the full name and address appeared to reduce the cooperation rate, we chose the other procedure for the study. The main disadvantages of this procedure were 1) an added responsibility for the interviewers to select eligible respondents for each strata, and 2) loss of the opportunity to explain the purpose and legitimacy of the study in a letter. However, the interviewers read a detailed explanation of the study purpose and the confidentiality guidelines as stated in all National Institutes of Health epidemiologic studies to all respondents. During the study only one of the selected subjects refused because of her concern about the legitimacy of the study.

The questionnaire consisted of 23 questions primarily concerned with pregnancy history, menstrual history, and present and prior use of birth control and female hormone pills. No one refused because of the sensitivity of our particular questions. Other factors that may have contributed to the high response rate were the brevity of the questionnaire (5–10 minutes on average) and the fact that all respondents and interviewers were women. Of the respondents, 71 per cent were white, 25 per cent were black, and 4 per cent were of other races.

Data from other studies we and our colleagues have done during the last four years indicate that the combination of sampling and interviewing into one telephone call probably accounted for the relatively high response rate. Using data from these other studies (approximately 25 in total), we hope to examine the influences on telephone response rates in epidemiologic research in greater detail.

## References

1. Waksberg J. Sampling methods for random digit dialing. J Am Stat Assoc 1978;73:40-6.